

```

EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTTTTTTTTTTTTTTT
EEE DDD DDD TTT
EEE DDD DDD TTT
EEE DDD DDD TTT
EEE DDD DDD TTT
EEE DDD DDD TTT
EEE DDD DDD TTT
EEEEEEEEEEEEEE DDD DDD TTT
EEEEEEEEEEEEEE DDD DDD TTT
EEEEEEEEEEEEEE DDD DDD TTT
EEE DDD DDD TTT
EEE DDD DDD TTT
EEE DDD DDD TTT
EEE DDD DDD TTT
EEE DDD DDD TTT
EEE DDD DDD TTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTT

```

**EXE**

Mod

EDT

ED<sup>1</sup>ED  
EDED  
EDED  
EDED  
ED

ED

ED

ED

ED

ED  
EDSYN  
LBA

110

---

```
CCCCCCCCC HH HH MM MM PPPPPPP AAAAAA RRRRRRRR EEEEEEEEE NN NN
CCCCCCCCC HH HH MM MM PPPPPPP AAAAAA RRRRRRRR EEEEEEEEE NN NN
CC HH HH MMM MMM PP PP AA AA RR RR EE EEEEEEEEE NN NN
CC HH HH MMM MM MM PP PP AA AA RR RR EE EEEEEEEEE NN NN
CC HH HH MM MM PP PP AA AA RR RR EE EEEEEEEEE NN NN
CC HHHHHHHH MM MM PPPPPPP AAAAAA RRRRRRRR EEEEEEEEE NN NN
CC HHHHHHHH MM MM PPPPPPP AAAAAA RRRRRRRR EEEEEEEEE NN NN
CC HH HH MM MM PP PP AA AA RRRRRRRR EEEEEEEEE NN NN
CC HH HH MM MM PP PP AA AA RR RR EE EEEEEEEEE NN NN
CC HH HH MM MM PP PP AA AA RR RR EE EEEEEEEEE NN NN
CC HH HH MM MM PP PP AA AA RR RR EE EEEEEEEEE NN NN
CCCCCCCCC HH HH MM MM PP PP AA AA RR RR EEEEEEEEE NN NN
CCCCCCCCC HH HH MM MM PP PP AA AA RR RR EEEEEEEEE NN NN
```

```
LL I I I I I S S S S S S S
LL I I I I I S S S S S S
LL I I S S
LL I I S S
LL I I S S
LL I I S S S S S S
LL I I S S S S S
LL I I S S
LL I I S S
LL I I S S
LL I I S S
LLLLLLLLLL I I I I I S S S S S S
LLLLLLLLLL I I I I I S S S S S S
```

.....



```
0001 0 %TITLE 'EDT$CHMPAREN - handle parentheses'
0002 0 MODULE EDT$CHMPAREN (
0003 0 IDENT = 'V04-000'
0004 0 ) =
0005 1 BEGIN
0006 1
0007 1 *****
0008 1 *
0009 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
0010 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
0011 1 * ALL RIGHTS RESERVED.
0012 1 *
0013 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
0014 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
0015 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
0016 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
0017 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
0018 1 * TRANSFERRED.
0019 1 *
0020 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
0021 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
0022 1 * CORPORATION.
0023 1 *
0024 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0025 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0026 1 *
0027 1 *
0028 1 *****
0029 1
0030 1
0031 1 ++
0032 1 FACILITY: EDT -- The DEC Standard Editor
0033 1
0034 1 ABSTRACT:
0035 1
0036 1 This module implements a parenthesized string of commands.
0037 1
0038 1 ENVIRONMENT: Runs at any access mode - AST reentrant
0039 1
0040 1 AUTHOR: Bob Kushlis, CREATION DATE: Unknown
0041 1
0042 1 MODIFIED BY:
0043 1
0044 1 1-001 - Original. DJS 04-Feb-1981. This module was created by
0045 1 extracting the routine EDT$SPARENT from module CHANGE.BLI.
0046 1 1-002 - Regularize headers. JBS 03-Mar-1981
0047 1 1-003 - Use new message codes. JBS 04-Aug-1981
0048 1 1-004 - Add return values. JBS 02-Oct-1981
0049 1 1-005 - Add an entry point so that this module can be loaded back into
0050 1 memory after calling the change mode parser. Also, use a different
0051 1 symbol for the name of the change mode parser so the call can be
0052 1 ignored by the overlay analyzer (and so that the call can be
0053 1 intercepted by a routine which will load us back into memory).
0054 1 JBS 02-Apr-1982
0055 1 1-006 - Set a flag if control C actually aborts something. JBS 24-May-1982
0056 1 1-007 - If an error occurs in processing the commands inside parens, such
0057 1 as string not found, continue after the right paren. JBS 23-Feb-1983
```

EDT\$CHMPAREN  
V04-000

EDT\$CHMPAREN - handle parentheses

E 5  
16-Sep-1984 00:06:07  
14-Sep-1984 12:22:40

VAX-11 BLISS-32 V4.0-742  
DISK\$VMSMASTER:[EDT.SRC]CHMPAREN.BLI;1 Page 2 (1)

: 58  
: 59  
0058 1 !--  
0059 1

EDT  
V04



EDT\$CHMPAREN  
V04-000

EDT\$CHMPAREN - handle parentheses  
Declarations

F 5  
16-Sep-1984 00:06:07  
14-Sep-1984 12:22:40

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[EDT.SRC]CHMPAREN.BLI;1 Page 3 (2)

```
: 61      0060 1 %SBTTL 'Declarations'
: 62      0061 1
: 63      0062 1  TABLE OF CONTENTS:
: 64      0063 1
: 65      0064 1
: 66      0065 1  REQUIRE 'EDT$SRC:TRAROUNAM';
: 67      0504 1
: 68      0505 1  FORWARD ROUTINE
: 69      0506 1      EDT$PARENT,
: 70      0507 1      EDT$LOAD_CHMPAREN : NOVALUE;
: 71      0508 1
: 72      0509 1
: 73      0510 1  INCLUDE FILES:
: 74      0511 1
: 75      0512 1
: 76      0513 1  REQUIRE 'EDT$SRC:EDTREQ';
: 77      0648 1
: 78      0649 1
: 79      0650 1  MACROS:
: 80      0651 1
: 81      0652 1      NONE
: 82      0653 1
: 83      0654 1  EQUATED SYMBOLS:
: 84      0655 1
: 85      0656 1      NONE
: 86      0657 1
: 87      0658 1  OWN STORAGE:
: 88      0659 1
: 89      0660 1      NONE
: 90      0661 1
: 91      0662 1  EXTERNAL REFERENCES:
: 92      0663 1
: 93      0664 1      In the routine
```

```
! Collect and execute a parenthesized string of commands
! Load this module into memory (on the PDP-11)
```

EDT  
V04

```

95 0665 1 %SBTTL 'EDT$$PARENT - handle parentheses'
96 0666 1
97 0667 1 GLOBAL ROUTINE EDT$$PARENT (
98 0668 1     COUNT
99 0669 1     EXECUTE
100 0670 1 ) =
101 0671 1
102 0672 1 ++
103 0673 1 FUNCTIONAL DESCRIPTION:
104 0674 1
105 0675 1     This routine implements a parenthesized string of commands. The
106 0676 1     string is analyzed without execution in order to verify it syntactically,
107 0677 1     and find the end of the string. It is then executed COUNT times, or until
108 0678 1     a command in the string fails. In either case, EDT$$A_CMD_BUF is left pointing
109 0679 1     at the first character after the parenthesized command list.
110 0680 1
111 0681 1 FORMAL PARAMETERS:
112 0682 1
113 0683 1     COUNT                Number of times to execute
114 0684 1
115 0685 1     EXECUTE                1 = execute the commands
116 0686 1
117 0687 1 IMPLICIT INPUTS:
118 0688 1
119 0689 1     EDT$$A_CMD_BUF
120 0690 1
121 0691 1 IMPLICIT OUTPUTS:
122 0692 1
123 0693 1     EDT$$G_CC_DONE
124 0694 1
125 0695 1 ROUTINE VALUE:
126 0696 1
127 0697 1     1 = ok, 0 = control C, 2 = end of journal file
128 0698 1
129 0699 1 SIDE EFFECTS:
130 0700 1
131 0701 1     NONE
132 0702 1
133 0703 1 --
134 0704 1
135 0705 2 BEGIN
136 0706 2
137 0707 2 EXTERNAL ROUTINE
138 0708 2     EDT$$MSG_BELL : NOVALUE,
139 0709 2     EDT$$CHK_CC,
140 0710 2     EDT$$CHM_PAREXE_NOOVERLAY;
141 0711 2
142 0712 2 EXTERNAL
143 0713 2     EDT$$A_CMD_BUF,
144 0714 2     EDT$$G_CC_DONE;
145 0715 2
146 0716 2 MESSAGES ((PARENMISS));
147 0717 2
148 0718 2 LOCAL
149 0719 2     SUCCEED,
150 0720 2     COM_END,
151 0721 2     COM_START;
```



EDT\$CHMPAREN  
V04-000

EDT\$CHMPAREN - handle parentheses  
EDT\$SPARENT - handle parentheses

H 5  
16-Sep-1984 00:06:07  
14-Sep-1984 12:22:40

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[EDT.SRC]CHMPAREN.BLI;1  
Page 5  
(3)

```

152 0722 2
153 0723 2 EDT$A_CMD_BUF = COM_START = CH$PLUS (.EDT$A_CMD_BUF, 1);
154 0724 2
155 0725 2 + Check syntax and find the end of the command.
156 0726 2 -
157 0727 2 SUCCEED = EDT$SCHM_PAREXE_NOOVERLAY (0);
158 0728 2
159 0729 2 IF (.SUCCEED NEQ 1) THEN RETURN (.SUCCEED);
160 0730 2
161 0731 2 COM_END = .EDT$A_CMD_BUF;
162 0732 2 +
163 0733 2 - If we are not positioned on the right paren we have a syntax error.
164 0734 2
165 0735 2
166 0736 2 IF (CH$RCHAR (.COM_END) NEQ %C')')
167 0737 2 THEN
168 0738 2 BEGIN
169 0739 2 EDT$MSG_BELL (EDT$_PARENMIS);
170 0740 2 RETURN (0);
171 0741 2 END;
172 0742 2
173 0743 2 IF .EXECUTE
174 0744 2 THEN
175 0745 2
176 0746 2 DECR I FROM .COUNT - 1 TO 0 DO
177 0747 2 BEGIN
178 0748 2
179 0749 2 IF EDT$CHK_CC ()
180 0750 2 THEN
181 0751 2 BEGIN
182 0752 2 EDT$G_CC_DONE = 1;
183 0753 2 RETURN (0);
184 0754 2 END;
185 0755 2
186 0756 2 EDT$A_CMD_BUF = .COM_START;
187 0757 2 SUCCEED = EDT$SCHM_PAREXE_NOOVERLAY (1);
188 0758 2
189 0759 2 IF (.SUCCEED NEQ 1) THEN EXITLOOP;
190 0760 2
191 0761 2 END;
192 0762 2
193 0763 2 EDT$A_CMD_BUF = CH$PLUS (.COM_END, 1);
194 0764 2 +
195 0765 2 - Don't indicate an error in executing the command within parens as an error
196 0766 2 in executing this command. This allows multiple commands to be executed
197 0767 2 terminated by search failures.
198 0768 2
199 0769 2
200 0770 2 IF (.SUCCEED EQL 0) THEN SUCCEED = 1;
201 0771 2
202 0772 2 RETURN (.SUCCEED);
203 0773 1 END;
```

! of routine EDT\$PARENT

.TITLE EDT\$CHMPAREN EDT\$CHMPAREN - handle parentheses  
.IDENT \V04-000\

EDT\$CHMPAREN  
V04-000

EDT\$CHMPAREN - handle parentheses  
EDT\$\$PARENT - handle parentheses

I 5  
16-Sep-1984 00:06:07  
14-Sep-1984 12:22:40

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[EDT.SRC]CHMPAREN.BLI;1  
Page 6  
(3)

EDT  
V04

				00FC 00000	.EXTRN	EDT\$\$MSG_BELL, EDT\$\$CHK_CC	
					.EXTRN	EDT\$\$SCHM_PAREXE_NOOVERLAY	
					.EXTRN	EDT\$\$A_CMD_BUF, EDT\$\$G_CC_DONE	
					.EXTRN	EDT\$PARENMIS	
					.PSECT	_EDT\$CODE, NOWRT, SHR, PIC, 2	
					.ENTRY	EDT\$\$PARENT, Save R2, R3, R4, R5, R6, R7	0667
					MOVAB	EDT\$\$SCHM_PAREXE_NOOVERLAY, R7	
					MOVAB	EDT\$\$A_CMD_BUF, R6	
54					ADDL3	#1, EDT\$\$A_CMD_BUF, COM_START	0723
					MOVL	COM_START, EDT\$\$A_CMD_BUF	
					CLRL	-(SP)	0727
					CALLS	#1, EDT\$\$SCHM_PAREXE_NOOVERLAY	
					MOVL	R0, SUCCEED	
					CMPL	SUCCEED, #1	0729
					BNEQ	6\$	
					MOVL	EDT\$\$A_CMD_BUF, COM_END	0731
					CMPB	(COM_END), #41	0736
					BEQL	1\$	
					PUSHL	#EDT\$PARENMIS	0739
					CALLS	#1, EDT\$\$MSG_BELL	
					BRB	7\$	0740
					BLBC	EXECUTE, 5\$	0743
					MOVL	COUNT, I	0756
					BRB	4\$	
					CALLS	#0, EDT\$\$CHK_CC	0749
					BLBC	R0, 3\$	
					MOVL	#1, EDT\$\$G_CC_DONE	0752
					BRB	7\$	0753
					MOVL	COM_START, EDT\$\$A_CMD_BUF	0756
					PUSHL	#1	0757
					CALLS	#1, EDT\$\$SCHM_PAREXE_NOOVERLAY	
					MOVL	R0, SUCCEED	
					CMPL	SUCCEED, #1	0759
					BNEQ	5\$	
					SOBGEQ	I, 2\$	0746
					MOVAB	1(R5), EDT\$\$A_CMD_BUF	0763
					TSTL	SUCCEED	0770
					BNEQ	6\$	
					MOVL	#1, SUCCEED	
					MOVL	SUCCEED, R0	0772
					RET		
					CLRL	R0	0773
					RET		

; Routine Size: 125 bytes, Routine Base: \_EDT\$CODE + 0000

; 204 0774 1



EDT\$CHMPAREN  
V04-000

EDT\$CHMPAREN - handle parentheses

EDT\$\$LOAD\_CHMPAREN - load this module into memo

J 5  
16-Sep-1984 00:06:07  
14-Sep-1984 12:22:40

VAX-11 Bliss-32 V4.0-742

DISK\$VMSMASTER:[EDT.SRC]CHMPAREN.BLI;1

Page 7  
(4)

```
: 206      0775 1 %SBTTL 'EDT$$LOAD_CHMPAREN - load this module into memory'
: 207      0776 1
: 208      0777 1 GLOBAL ROUTINE EDT$$LOAD_CHMPAREN          ! Load this module into memory
: 209      0778 1      : NOVALUE =
: 210      0779 1
: 211      0780 1      ++
: 212      0781 1      FUNCTIONAL DESCRIPTION:
: 213      0782 1
: 214      0783 1          This routine has no function. It exists as an entry point so that
: 215      0784 1          EDT$$CHM_PAREXE_NOOVERLAY can call this module back into memory before
: 216      0785 1          returning to it.
: 217      0786 1
: 218      0787 1      FORMAL PARAMETERS:
: 219      0788 1
: 220      0789 1          NONE
: 221      0790 1
: 222      0791 1      IMPLICIT INPUTS:
: 223      0792 1
: 224      0793 1          NONE
: 225      0794 1
: 226      0795 1      IMPLICIT OUTPUTS:
: 227      0796 1
: 228      0797 1          NONE
: 229      0798 1
: 230      0799 1      ROUTINE VALUE:
: 231      0800 1
: 232      0801 1          NONE
: 233      0802 1
: 234      0803 1      SIDE EFFECTS:
: 235      0804 1
: 236      0805 1          NONE
: 237      0806 1
: 238      0807 1      --
: 239      0808 1
: 240      0809 2      BEGIN
: 241      0810 2      0
: 242      0811 1      END;
```

! of routine EDT\$\$LOAD\_CHMPAREN

0000 00000  
04 00002

.ENTRY EDT\$\$LOAD\_CHMPAREN, Save nothing  
RET

: 0777  
: 0811

; Routine Size: 3 bytes, Routine Base: \_EDT\$CODE + 007D

```
: 243      0812 1
: 244      0813 1 !<BLF/PAGE>
```

EDT\$CHMPAREN  
V04-000

EDT\$CHMPAREN - handle parentheses  
EDT\$\$LOAD\_CHMPAREN - load this module into memo

K 5  
16-Sep-1984 00:06:07  
14-Sep-1984 12:22:40

VAX-11 Bliss-32 V4.0-742  
DISK\$VM\$MASTER:[EDT.SRC]CHMPAREN.BLI;1

Page 8  
(5)

: 246 0814 1 END  
: 247 0815 1  
: 248 0816 0 ELUDOM

! of module EDT\$CHMPAREN

# PSECT SUMMARY

:  
: Name Bytes Attributes  
: \_EDT\$CODE 128 NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

## Library Statistics

:  
: File Total Symbols Loaded Percent Pages Mapped Processing Time  
: \_\$255\$DUA28:[EDT.SRC]EDT.L32;1 377 1 0 40 00:00.2  
: \_\$255\$DUA28:[EDT.SRC]PSECTS.L32;1 2 1 50 7 00:00.1

## COMMAND QUALIFIERS

:  
: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LISS\$:CHMPAREN/OBJ=OBJ\$:CHMPAREN MSRC\$:CHMPAREN.BLI/UPDATE=(ENHS\$:CHMP  
: AREN)

: Size: 128 code + 0 data bytes  
: Run Time: 00:12.7  
: Elapsed Time: 00:16.3  
: Lines/CPU Min: 3855  
: Lexemes/CPU-Min: 10502  
: Memory Used: 79 pages  
: Compilation Complete



0132 AH-BT13A-SE  
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION  
CONFIDENTIAL AND PROPRIETARY

